

## MDI - Solving equations (multi-step)

1.  $\frac{1}{2}x = 7$   $7 \cdot \frac{2}{1} = \frac{14}{1} = 14$

2.  $+5 + 2x = 11$   $x = 3$

## Solving Equations Review (Day 3)

**Learning Intentions:** I understand the steps used to solve one-variable equations using inverse operations.

**Success Criteria:** I can solve one-variable equations with 80% accuracy on an exit ticket.

To Solve Equations with variables on both sides:

1. Simplify both sides so each has only a variable term and a constant. (combine like terms)

2. Move all variable terms to one side. (Move the smaller of the 2 terms.)

3. Move all constant terms to the opposite side.

4. Solve the equation to get the variable by itself.

**Examples:** Determine which side you want the variable on. Then determine which side you want the constant on. Which variable should you move first?

1.  $\underline{7x} + 5 = \underline{4x} - 22$

$-4x \quad -4x$

$3x + 5 = -22$

$-5 \quad -5$

$\frac{3x}{3} = \frac{-27}{3}$

$x = -9$

2.  $6x + 10 = 9x + 7$

3.  $6x + 22 = 3x + 31$

4.  $4x + 12 = 6x + 8$

5.  $7 + 2n + 2 = 5n + 9 - 3n$

Finish the worksheet from yesterday. If you have already finished it, compare your answers with someone sitting next to you. Make corrections and then have Mrs. Casillas or Ms. Rowland check your work.

If you finish with all answers correct, work on worksheet #2 for extra practice!

**EXITTICKET:**

1)  $\frac{x}{5} + 7 = -3$

2)  $9x + 3 = 21$